

Masterflex® L/S® Digital Drives

Graphical interface and a maintenance-free high-accuracy motor

These L/S® precision drives offer high-accuracy motors and a graphical interface that makes setup and operation easier than ever. The high-contrast LCD shows four operating modes: continuous run, timed dispense, copy dispense, and volume dispense allowing you to view pump performance continually.

A programmable dispense interval allows hands-free dispensing and filling, and a cumulative volume feature totalizes volume dispensed over multiple cycles. Programmed calibration ensures dispense and display accuracy—drive stores one calibration value per tubing size.

Computer-compatible models operate as stand-alone drives or they can be interfaced with a PC.

Process drives features a NEMA 4X / IP66-rated housing; choose 316 stainless steel housing for sanitary and washdown applications or powder-coat steel for process, water treatment, and manufacturing applications where stainless steel is not a critical requirement.

Applications

- Dispensing and filling
- Fluid metering, feed, and transfer
- Acid/base pH control
- Precision additive, flavoring, and colorant delivery
- Sterile filtration and fluid transfer
- Automated fluid transfer
- Food/beverage and dairy process





- Wider speed range delivers flows from 0.001 to 3400 mL/min with L/S pump tubing
- Graphical LCD shows all operating parameters—ideal for critical process monitoring
- Brushless, maintenance-free motor offers ±0.1% speed control accuracy with a 6000 to 1 turndown
- Menu-driven interface lets you select one of seven languages for programming and operation
- Dispense by volume or time with a programmable delay interval between cycles
- Cumulative volume function tracks total volume pumped or dispensed
- Scaleable remote control of speed, direction, and start/stop enable process automation and integration
- Models available with open-head sensor capability instantly shuts down drive



Flow Rates in mL/min with Masterflex® L/S® Pump Heads*

| rpm | Precision pump tubing | | | | | | | High-Performance Precision pump tubing | | | |
|-------------|------------------------------------------------|--------------|-------------|--------------|--------------|--------------|---------------------------------------------------------------------|----------------------------------------|--------------------------------|--------------------------------|--|
| | L/S 13 | L/S 14 | L/S 16 | L/S 25 | L/S 17 | L/S 18 | L/S 15 | L/S 24 | L/S 35 | L/S 36 | |
| | Standard, Easy-Load, Easy-Load II, Easy-Load 3 | | | | | | Multichannel, Standard, Easy-Load II, Easy-Load 3, High-Performance | | | | |
| | Cartridge, Multichannel | | | Cartridge | | | Easy-Load | | | | |
| 0.1 to 600 | 0.006 to 36 | 0.021 to 130 | 0.08 to 480 | 0.17 to 1000 | 0.28 to 1700 | 0.38 to 2300 | 0.17 to 1000 (0.18 to 1100) | 0.28 to 1700 (0.30 to 1800) | 0.38 to 2300 (0.43 to 2600) | 0.48 to 2900 (0.57 to 3400) | |
| 0.02 to 100 | 0.001 to 6 | 0.004 to 21 | 0.016 to 80 | 0.033 to 170 | 0.057 to 280 | 0.077 to 380 | 0.033 to 170 (0.036 to 183) | 0.057 to 280 (0.057 to 300) | 0.077 to 380 (0.086 to 433) | 0.096 to 480 (0.113 to 566) | |

^{*}Flow rates in parentheses are for the L/S High-Performance pump head.







| rpm | Speed control (resolution) | Open-head sensor | Pump heads accepted | Motor size | IP rating | Dimensions | Power (50/60 Hz) | | |
|----------------|----------------------------------------------------|---------------------|------------------------|----------------|-----------|---------------------------------------------|------------------|-----------------------------------|--------------|
| | | | | | | (L x W x H) | VAC | AMPS | Cat. No. |
| Standard digit | tal drives | | • | | | | | | |
| 0.1 to 600 | ±0.1% (0.1 rpm at 600 rpm; 0.01 rpm at 100 rpm) | No | 2 | − ½ hp (75 W) | IP33 | 25.4 x 21.6 x 21.6 cm (10" x 8½" x 8½") | 90 to 260 | 2.2 at 115 VAC, 1.1 at 230 VAC | MFLX07522-20 |
| | | Yes | | | | | | | MFLX07522-28 |
| 0.02 to 100 | | No | 4 | | | | | | MFLX07522-30 |
| | | Yes | | | | | | | MFLX07522-38 |
| Computer-cor | mpatible/programmable digital | drives | | | | | | | |
| 0.1 to 600 | ±0.1% (0.1 rpm at 600 rpm; | No | 2 | √10 hp (75 W) | IP33 | 25.4 x 21.6 x 21.6 cm (10" x 8½" x 8½") | 90 to 260 | 2.2 at 115 VAC, 1.1 at 230 VAC | MFLX07551-20 |
| 0.02 to 100 | 0.01 rpm at 100 rpm) | No | 4 | | | | | | MFLX07551-30 |
| Digital proces | s drives with 316 stainless steel | housing | | | | | | | |
| 0.1 to 600 | ±0.1% (0.1 rpm at 600 rpm; 0.01 rpm at 100 rpm) | No | 2 | 1/10 hp (75 W) | IP66 | 0.5 x 22.9 x 23.5 cm (12" x 9" x 91/4") | 90 to 260 | 2.2 at 115 VAC, 1.1 at 230 VAC | MFLX07575-30 |
| | | Yes | | | | | | | MFLX07575-38 |
| 0.02 to 100 | | No | 4 | | | | | | MFLX07575-35 |
| Digital proces | s drives with powder-coat steel | housing | | | | | | | |
| 0.1 to 600 | ±0.1% (0.1 rpm at 600 rpm; 0.01 rpm at 100 rpm) | No | 2 | 1/10 hp (75 W) | IP66 | 30.5 x 22.9 x 23.5 cm (12" x 9" x 91/4") | 90 to 260 | 2.2 at 115 VAC, 1.1 at 230 VAC | MFLX07575-40 |
| | | Yes | | | | | | | MFLX07575-48 |
| 0.02 to 100 | | No | 4 | | | | | | MFLX07575-45 |

What's included: 6-ft (1.8-m) line cord with IEC 320/CEE22 socket. Drives are shipped with country-specific plug/cord set.

Complete Pump Systems

| System | Flow range (mL/min) | What's included | | | | |
|--------|---------------------|--------------------------------------------------------------|----------------------------------------------|------------------------------------------|--------------|--|
| | 0.28 to 1700 | L/S Easy-Load® II pump head 77200-62 | C-Flex ULTRA® L/S 24 tubing 06434-24 (10 ft) | Digital drive 07522-20 0.1 to 600 rpm | MFLX77921-75 | |
| | 0.08 to 480 | L/S Easy-Load II pump head with Open-Head Sensor 77200-30 | C-Flex ULTRA L/S 16 tubing 06434-16 (10 ft) | Digital drive 07522-28 0.1 to 600 rpm | MFLX77921-77 | |
| | 0.28 to 1700 | L/S Easy-Load II pump head with Open-Head Sensor 77200-32 | C-Flex ULTRA L/S 24 tubing 06434-24 (10 ft) | Digital drive 07522-28 0.1 to 600 rpm | MFLX77921-79 | |



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